

**COMMENTS AND RESPONSES ON  
PROPOSED REVISIONS TO THE  
REDESIGNATION DEMONSTRATION AND MAINTENANCE  
PLAN FOR THE MISSOURI PORTION OF THE  
ST. LOUIS OZONE NONATTAINMENT AREA  
AND  
RECOMMENDATION FOR ADOPTION**

On October 23 and 24, 2002, the Missouri Air Conservation Commission held public hearings concerning the Redesignation Demonstration and Maintenance Plan for the Missouri Portion of the St. Louis Ozone Nonattainment Area. The following is a summary of comments received and the Missouri Department of Natural Resources' corresponding responses. Any changes to the proposed maintenance plan are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the maintenance plan as revised.

**SUMMARY OF COMMENTS:** The Missouri Department of Natural Resources' Air Pollution Control Program received comments from Great Rivers Environmental Law Center, the Ozark Chapter of the Sierra Club, the Missouri Coalition for the Environment, St. Louis Regional Chamber and Growth Association (RCGA), Regform, the U.S. Environmental Protection Agency (EPA), Associated Industries of Missouri, and Ameren UE.

**COMMENT:** The Missouri Coalition for the Environment commented that it is far too early to declare victory over air pollution, however, and Missouri Department of Natural Resources must keep finding new ways to make the air cleaner

**RESPONSE:** The department's Air Pollution Control Program agrees that attaining the one-hour ozone standard is a milestone and will continue to examine ways to address the eight-hour ozone standard once EPA finalizes an implementation strategy. Therefore, no changes were made to the plan text as a result of this comment.

**COMMENT:** The Missouri Coalition for the Environment stated that while their organization does not doubt that there have been emission reductions achieved, the department has contradicted itself by concluding that the apparent absence of ozone exceedances is the result of permanent control measures.

**RESPONSE:** One of the criteria for redesignation is the State must reasonably attribute the improvement in air quality to emission reductions which are permanent and enforceable. In preparing the emission inventory, the department's Air Pollution Control Program considered the reductions achieved from federal and state control measures to estimate the emission reductions.

In addition, the department concluded that there was no strong correlation between the downward trends in the number of ozone exceedances and the number of ozone conducive days. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Missouri Coalition for the Environment, the Great Rivers Environmental Law Center and the Sierra Club commented that the voluntary efforts taken by industries and citizens to reduce utilities and the effort by the Director of the department's Air Pollution Control Program and by RCGA to obtain major voluntary reductions in emissions on a crucial weekend in September were not a basis for redesignation of the area to attainment. For an area to be accurately redesignation normal conditions under applicable regulations should be monitored to determined if they produce an exceedance of the ozone standard.

RESPONSE: It is evident that the air quality in the St. Louis nonattainment area has improved dramatically over the past two decades. This improvement is due to federal and state control measures that have been implemented over the years. Any additional voluntary efforts taken by industries and citizens to further protect the air quality are welcome. There is no evidence that any exceedances would have occurred during the voluntary efforts. In fact, on September 1<sup>st</sup> and 2<sup>nd</sup> (labor day) of 2002, the West Alton monitoring station registered the maximum ozone concentrations of 0.103 ppm and 0.065 ppm, significantly below the 0.125 ppm standard. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center, the Missouri Coalition for the Environment, and the Sierra Club commented that both Missouri and Illinois plan to relax the regulations. RCGA commented to hold the existing nonattainment New Source Review (NSR) program in place through the summer of 2003 and recommended formation of a stakeholder group this winter to begin development of an Interim New Source Review Program for St. Louis. RCGA believes that an Interim NSR program would be an effective means to prevent air quality backsliding in St Louis. Imposition of the lowest achievable emission rate (LAER) standard places St. Louis at a competitive disadvantage to the rest of the state. Ameren UE, Associated Industries of Missouri, and Regform supported RCGA's position regarding NSR provision of the maintenance plan.

RESPONSE AND EXPLANATION OF CHANGE: When an area attains the standard, the NSR permitting program is still applicable to the area. The NSR program contains two types of permit reviews for major sources or major modification at existing sources. The type of review depends on the designation of the area. Prevention of Significant Deterioration (PSD) reviews are required for new emission sources in attainment area while similar emission sources in the nonattainment area are subject to Nonattainment Area Review requirements. Under the Clean Air Act, an area that attained the standard may adopt the PSD portion of the NSR program. One component of the PSD program is BACT analysis, a control technology evaluation that considers economic, energy and environmental impacts when selecting an emission control technology. There are no offset requirements under the PSD program. In addition, for many new sources, PSD is triggered when emissions are greater than 250 tons per year. While the EPA allows to revert to PSD review when an area attains the standard, the department believes that this option would not be beneficial to the St. Louis area's air quality. The review requirements under Nonattainment Area review differ from the PSD requirements. LAER and emissions offsets are the primary requirements of the nonattainment area review. Unlike BACT review, economic impacts are not considered when selecting a control technology under LAER review. The

department believes that some of the nonattainment major review elements, such as, emission offsets and existing applicability review thresholds for major sources should be retained to protect the air quality throughout the maintenance plan period. Because both LAER and BACT are control technology based standards, LAER type control level is evaluated in the BACT analysis. If an emission increase is expected when comparing LAER and BACT emission control levels, the offset provision in the maintenance plan will mitigate the difference, resulting in no emission increase in the area. This will prevent the area from backsliding. Thus, the department will retain LAER and 1.15 : 1 offset ratio requirements through the 2003 ozone season and then an interim NSR program will be implemented, unless contingency measures are triggered. At a minimum, this interim NSR program will contain an emission-offset provision and the existing review threshold (100 ton/year for new sources). LAER and a higher offset ratio will be implemented as contingency measures, if needed. Changes were made in section 5.5 as a result of the comments.

COMMENT: The Missouri Coalition for the Environment commented the department should work with Illinois Protection Agency to maintain all the current standards.

RESPONSE: The department's Air Pollution Control Program has worked closely with Illinois, U. S. EPA Region V and VII to develop the maintenance plan and continues to do so. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and the Sierra Club commented that there is no basis for an expectation that, if we maintain our present controls, we will avoid an excessive number of exceedances in the near future.

RESPONSE: The department's Air Pollution Control Program has demonstrated that future emissions will be significantly lower than the attainment year emissions. The department's Air Pollution Control Program relied on existing control measures as well as future federal initiatives, such as the NOx SIP call. Thus, we expect the air quality will continue to improve and the number of exceedances will remain lower or continue to decrease without triggering a violation. If the area measures exceedances which trigger Level I contingency responses in the maintenance plan, the department's Air Pollution Control Program will evaluate if adverse emissions trends will likely continue and whether any further emission control measures should be implemented. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and the Sierra Club commented that the 4-hour episode at Orchard Farm in September was pure luck. There is no basis for an expectation that, if that episode were repeated, the air movement would not shift slightly to the east, causing a fourth exceedances at West Alton.

RESPONSE: The standard for attainment is based on a three-year average monitoring data which takes into account the various meteorological conditions for ozone formation. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and the Sierra Club commented that there is no valid data showing that the maintenance plan will attain or maintain the National Ambient Air Quality Standards (NAAQS) even if the existing regulations remain in effect.

RESPONSE: The department's Air Pollution Control Program demonstrates maintenance through the use of the emission inventory projections. If the future emissions of pollutants or

precursors do not exceed the 2000 base year level of the attainment inventory, maintenance is demonstrated. Table 4.6 of the maintenance plan illustrates downward trends in both volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions through projected year 2014. Based on these emission trends, it is expected that the air quality will continue to meet the one-hour ozone NAAQS throughout the maintenance period. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and the Sierra Club stated that if EPA determines that we attained the NAAQS that we did so by the narrowest of margins.

RESPONSE: Out of eleven monitoring sites in the Missouri portion of the St. Louis area, eight monitoring sites recorded no exceedances based on three years of air quality data. Only the West Alton monitoring site recorded the maximum allowed exceedances. But no monitoring site registered a violation during the 2000-2002 period. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and the Sierra Club commented that some of the regulations which are included in the maintenance plan are probably illegal, under 643.055 (the no stricter than clause)

RESPONSE: The state measures adopted in the state implementation plan and relied on in the maintenance plan are federally enforceable. Section 643.055 states --The restrictions of this section shall not apply to the parts of a state implementation plan developed by the commission to bring a nonattainment area into compliance and to maintain compliance when needed--. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The Great Rivers Environmental Law Center and Sierra Club commented that the maintenance plan makes no allowance for foreseeable major increases in emissions of VOC and NOx in or near the nonattainment area such as Mills mega-mall and resulting vehicle emissions and Holcim cement plant. These increases greatly exceed normal growth plans and require adjustment of expectations.

RESPONSE: To demonstrate that air quality will continue to meet the one-hour standard, future emissions must not exceed the level of attainment inventory. The emission projections which include growth factors estimates significant reductions in emissions when compared to the attainment year inventory. In addition, the maintenance plan contains contingency measures in event the emission inventory in 2005 and 2008 increase more than 5% above the levels included in the 2000 emissions inventories. As far as emission increases outside the nonattainment area, there are no requirements to address these emission increases in the maintenance plan. New sources that are seeking to locate outside the nonattainment area, must go through the NSR permitting process. A case by case evaluation of their impact may be required depending on the magnitude of the emissions and its proximity. Also, the maintenance plan establishes a mobile emission cap on vehicle activities. Therefore, no changes were made to the plan text as a result of this comment.

COMMENT: The EPA commented that changes to the list of contingencies included in Table 7.1 are recommended to enhance the contingency measures and help ensure maintenance of the NAAQS. Statewide NOx SIP call, Tier II vehicle standards and low sulfur fuel heavy duty diesel standards and low sulfur diesel fuel and federal off-road engines standards should only be

included to the extent that the emissions reductions achieved by these rules are not necessary for the maintenance of the NAAQS. EPA recommended that these measures either be removed from the list of potential contingency measures, or an explanation be included as to why the reductions from these measures are not needed to maintain the NAAQS.

RESPONSE AND EXPLANATION OF CHANGE: The department relied on these rules to demonstrate maintenance. Changes were made to Table 7.1 as a result of this comment.

COMMENT: The EPA commented to eliminate separate contingency measures for the years 2003 through 2004 and 2005 through 2014 to allow for an evaluation to be conducted when an exceedance occurs. The proposed 2003 - 2004 time period does not allow for such evaluation.

RESPONSE AND EXPLANATION OF CHANGE: In response to the previous comment, the contingency measures for 2003-2004 have been removed, allowing for an evaluation of exceedances and implementation of control measures if necessary during the 2003-2004 time period. Changes were made to Table 7.1 as a result of this comment.

COMMENT: The EPA suggested to include a statement in Level I Trigger in the “Action to be Taken” column stating that selected measures shall be implemented as expeditiously as practicable taking in consideration the ease of implementation and the technical and economic feasibility of selected measures.

RESPONSE AND EXPLANATION OF CHANGE: To be consistent with language in Level II Trigger, this change was made to Table 7.1.

COMMENT: The EPA commented that the phrase--expeditiously as practicable--should be further defined. EPA will generally expect the implementation of contingency measures under Level I or Level II triggers within 24 months unless the department demonstrates that technical or economic feasibility warrants an implementation longer than 24 months.

RESPONSE AND EXPLANATION OF CHANGE: The term--expeditiously as practicable--is not defined in the proposed maintenance plan. Changes were made to reflect the suggested language in Section 7.1.

COMMENT: The EPA supported the department’s Air Pollution Control Program’s recommendation to keep in effect emission offsets and LAER. If the department’s Air Pollution Control Program intends, as result of expected comments, to modify how offsets, LAER and/or BACT are implemented in the St. Louis area, a description of the intended modifications should be included in the maintenance plan. At a minimum, LAER and offsets should continue to be included as a contingency measure.

RESPONSE AND EXPLANATION OF CHANGE: If an interim NSR program becomes effective, the LAER and offsets requirement will be retained as contingency measures. Table 7.1 is revised to include the LAER and offsets requirement. Also, the department’s Air Pollution Control Program clarified its intention to implement an interim NSR program in section 5.5.

COMMENT: The EPA recommends including in section 4 a commitment to compare subsequent inventories to the 2000 inventory to see if it has been exceeded. Section 4 includes a commitment that emissions inventories will be updated every three years. The purpose of the updates is to track the progress of the maintenance plan if it is indeed maintaining the NAAQS.

RESPONSE AND EXPLANATION OF CHANGE: The department's Air Pollution Control Program added additional language to clarify the purpose of the updated inventory in section 4.

COMMENT: The EPA recommends including a descriptive language in section 4.1 about the model used for vehicle miles traveled and the planning assumptions related to it and the approval date of the planning assumptions. Indicate if the same planning assumptions used for VMT calculations were also used for the on-road and area source inventories.

RESPONSE AND EXPLANATION OF CHANGE: Additional language were added in subsection 6.3 as a result of this comment

COMMENT: The EPA recommends a statement that clearly states that the emissions in Tables 4.1, 4.2, 4.4, 4.5, 4.6, 4.7, 4.8 and 6.3 are for the Missouri portion of the St. Louis nonattainment area. In addition, section 6 and Table 6.1 nonattainment should be specified as subarea budgets applicable to the Missouri portion of the St. Louis nonattainment area.

RESPONSE AND EXPLANATION OF CHANGE: The department's Air Pollution Control Program clarified that the motor vehicle budget is applicable to the Missouri portion of the St. Louis nonattainment area in section 6.

COMMENT: The EPA recommends including a description of the model used to calculate off-road emissions.

RESPONSE AND EXPLANATION OF CHANGE: Changes to section 4.3 were made to incorporate a description of the model that was used to calculate off-road emissions.

COMMENT: The EPA recommends including in section 4.4 a clarification of what NO<sub>x</sub> control measures were included when calculating future NO<sub>x</sub> inventory levels and a commitment to implement rules is, if applicable, needed.

RESPONSE AND EXPLANATION OF CHANGE: The department's Air Pollution Control Program relied on NO<sub>x</sub> emission reductions from electric generating units to demonstrate maintenance. A commitment to implement this rule was added in section 4.4.

COMMENT: The EPA commented that section 5 states that existing control measures identified in the ROP plan will remain in effect to maintain the one-hour air quality standard. This section should state that the existing control measure will remain in effect, but it is the existing control measures as well as the other measures identified in the maintenance plan that are relied upon to maintain the standard.

RESPONSE AND EXPLANATION OF CHANGE: Changes were made to section 5 to clarify that the Department relied on the existing control measures and other measures identified in the maintenance plan to maintain one-hour ozone standard.

COMMENT: The EPA commented that some corrections to the list of state and federal regulation included in section 5.1 are needed. The corrections and additions are

- Commonly we refer to the vehicle inspection and maintenance program
- Remove Phase I Reformulated Gasoline since it has been replaced by Phase II
- The language should refer to the Federal motor vehicle control program
- The list should refer to Federal Off-road engine, equipment and vehicle program

RESPONSE AND EXPLANATION OF CHANGE: The department's Air Pollution Control Program agrees and changes were made to section 5.2 as a result of this comment.

COMMENT: The EPA commented that the maintenance plan must only provide a budget for on-road emissions since the transportation conformity is not a requirement of the maintenance plan. EPA recommends submitting the 2004 budget under separate cover to clearly indicate that the budget is a separate commitment from the maintenance plan.

RESPONSE AND EXPLANATION OF CHANGE: The maintenance plan includes the 2014 mobile budget. The 2004 budget is removed and will be submitted separately to EPA. The 2004 budget is not required under the maintenance plan. The department's Air Pollution Control Program made a commitment to revise the 2004 mobile budget using MOBILE6 once EPA finalized the model.

COMMENT: The EPA commented that at the end of section 1.1, it is recommended that a statement be included clarifying that the maintenance plan does not address the eight-hour ozone standard

RESPONSE AND EXPLANATION OF CHANGE: For clarification, additional language was added in section 1.1 as a result of this comment.

COMMENT: The EPA stated that in section 4.4, the reference to Table 4.5 should be changed to reference Table 4.6.

RESPONSE AND EXPLANATION OF CHANGE: Section 4.4 referenced the wrong table. Changes were made to reflect the correct table.

COMMENT: The EPA commented that in section 5.5, the reference to--Lowest Emission Achievable Rate (LEAR)--should be changed to--Lowest Achievable Emission Rate--LAER.

RESPONSE AND EXPLANATION OF CHANGE: Section 5.5 referenced LAER incorrectly. Changes were made to section 5.5.

COMMENT: The EPA recommended that at the end of section 6.1, a statement be included clarifying or discussing how the mobile source controls in Franklin county differ from those in other portion of the nonattainment area

RESPONSE AND EXPLANATION OF CHANGE: St. Louis City and St. Louis, St. Charles and Jefferson County gasoline-powered light-duty vehicles are currently subject to a biennial, centralized, enhanced I/M program. Franklin County gasoline-powered light-duty vehicles are currently subject to an annual, centralized, basic I/M program. Changes were made to section 6.3 as a result of this comment.

COMMENT: Ameren UE commented that there appears to be inconsistencies in emission data included in the Appendices of the proposed Maintenance Plan.

RESPONSE AND EXPLANATION OF CHANGE: The department's Air Pollution Control Program found that Table 1- 1999 Ozone Season for NOx and VOC emission data appear to be inconsistent with the point source emissions data in the inventory summary tables in Appendix B. This is due to the inclusion of banked emissions data with Table 1 point source emissions data in the inventory summary tables. Also, a couple of banked emissions data were not reflected in some of the inventory summary tables and minor corrections were also made in the

inventory summary tables. Consequently, point source NO<sub>x</sub> emissions values were decreased from 149.5 to 146.62 in Table 4.4 and increased from 154.57 to 155.45 in Table 4.5 of the plan text. Corrections to these tables result in small changes in emission tabulations, insignificant for the purpose of the maintenance plan. Changes were made to Appendix B and table 4.4, 4.5, and 4.6 in the plan text as a result of this comment.

COMMENT: Ameren also commented that the NO<sub>x</sub> emissions for the Ameren UE plants for the year 2000 do not match between the table labeled--Table 1 1999 Ozone Season NO<sub>x</sub> Emissions (tons/day)" and the table labeled--NO<sub>x</sub> Emissions from Utility boilers in Eastern 1/3 of State.

RESPONSE: For the purpose of the maintenance plan, the department's Air Pollution Control Program utilized (Table 1) 1999 Ozone season inventory information for all NO<sub>x</sub> sources within the nonattainment area. Appropriate growth factors were considered for utility and non-utility emission sources. Then, to illustrate emission reductions from utilities in the eastern 1/3 of Missouri including the St. Louis area, the department utilized the NO<sub>x</sub> SIP call emission inventory and EPA growth factor for the utilities to project the emissions to 2000 and 2007 from 1996 NO<sub>x</sub> SIP call base year inventory. The difference in these tables are due to the different inventory base years.



